

## X-RAY SPECTROMETER

Patent Number: JP2001033408  
Publication date: 2001-02-09  
Inventor(s): SAKAMAE HIROSHI  
Applicant(s): SHIMADZU CORP  
Requested Patent: JP2001033408  
Application Number: JP19990207822 19990722  
Priority Number(s):  
IPC Classification: G01N23/225; G21K1/06  
EC Classification:  
Equivalents:

---

### Abstract

---

**PROBLEM TO BE SOLVED:** To provide an X-ray spectrometer capable of increasing the size of an analysis sample and enlarging the range of movement of a sample without the need for a guide.

**SOLUTION:** This X-ray spectrometer is a wavelength dispersive-type X-ray spectrometer to disperse X-rays through the use of diffraction by a curved-type dispersing crystal and is provided with both a distance control mechanism to make the distance Q between the dispersing crystal and an X-ray detector equal to  $2R\sin\theta$  when the radius of a Rowland circle 1 is R and the angle of incidence of X-rays onto the dispersing crystal is  $\theta$  and an angle control mechanism interlocked with the rectilinear movements of the dispersing crystal along the axis E of movement of the crystal to control the angle of the axis of a crystal surface and the axis G of movement of the X-ray detector Q and to make the angle of incidence of X-rays onto the dispersing crystal and the angle of emergence toward the X-ray detector Q equal to  $\theta$ .

---

Data supplied from the **esp@cenet** database - I2